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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,720	07/16/2003	Charles Edward Akers JR.	2001-0879.02	9579

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LEXMARK INTERNATIONAL, INC.
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EXAMINER

NUTTER, NATHAN M

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,720

Applicant(s)

AKERS ET AL.

Examiner

Nathan M. Nutter

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7 and 10-14 is/are rejected.
- 7) ☒ Claim(s) 5 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1711

DETAILED ACTION

This application has been re-assigned to Examiner Nathan M. Nutter in Art Unit 1711. All inquiries regarding this application should be directed to Examiner Nutter at telephone number 571-272-1076.

Response to Amendment

In view of applicants' amendment of 18 April 2005 the following is effective:

The rejection of claims 1, 5 and 6 under 35 U.S.C. 102(b) as being anticipated by Momose (US 6,695,898) is hereby expressly withdrawn.

The rejection of claims 1-4 and 7-10 under 35 U.S.C. 103(a) as being unpatentable over Momose (US 6,695,898) in view of Sun (US 6,402,825) and Okoshi et al (US 4,710,230) is hereby expressly withdrawn.

The rejection of claims 1 and 11-14 under 35 U.S.C. 103(a) as being unpatentable over Momose (US 6,695,898) in view of Beach et al (US 5,719,204) is hereby expressly withdrawn.

The rejection of claims 15-24 under 35 U.S.C. 103(a) as being unpatentable over Momose (US 4710230) in view of Sun (US 6402825) and Okoshi et al (US 4710230) is hereby expressly withdrawn.

The rejection of claims 15 and 25-28 under 35 U.S.C. 103(a) as being unpatentable over Momose (US 6,695,898) in view of Beach et al (US 5,719,204) is hereby expressly withdrawn.

Claims 1-8 and 10-14 are pending.

Claim Objections

Claims 5 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, 7 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Sun et al (US 2004/0127619), newly cited.

Note the Abstract for the broad concept. The published application teaches the use of the nitrogen-containing constituent at paragraph [0059], including the lower molecular weights as recited in claim 6. Polymeric dispersants are taught at paragraphs [0037]-[0040]. The use of pigments is taught at paragraph [0035].

Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Butler et al (USPN 6,638,350), newly cited.

Art Unit: 1711

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The reference to Butler et al teaches the production of an ink composition that at column ² (lines 19-36) may comprise a pigment of an oxidized carbon black as recited in claim 2. Note column 1 (lines 47-59) wherein a cyclic nitrogen-containing compound having a molecular weight as recited in claims 6 and 7.

Claims 1, 6, 7 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Beach et al (USPN 5,719,204), cited previously.

The reference to Beach et al teaches the production of an ink composition that at column 9 (lines 7-39) may comprise a pigment, at the paragraph bridging column 9 to column 10 may comprise a cyclic nitrogen-containing compound having a molecular weight as recited in claims 6 and 7. The reference teaches the use of polymeric dispersants as in claim 11.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beach et al (USPN 5,719,204), Butler et al (USPN 6,638,350), and

Art Unit: 1711

Sun et al (US 2004/0127619) together, as applied to claims 1, 2, 6, 7, 10 and 11 above, and further in view of Sun (USPN 6,402,825), previously cited.

The reference to Sun (USPN 6,402,825) teaches the production and use of a surface modified carbon black pigment identical to that recited and claimed. The reference further teaches the use of a binder.

The primary references to Beach et al (USPN 5,719,204), Butler et al (USPN 6,638,350), and Sun et al (US 2004/0127619) all show the conventionality of producing an inkjet ink comprising a pigment, a nitrogen-containing cyclic component in an aqueous vehicle, as recited and claimed herein. The references to Beach et al (USPN 5,719,204) and Sun et al (US 2004/0127619) teach the conventionality of using polymeric dispersants.

Subsequent employment of the pigment disclosed by Sun (USPN 6,402,825) in the compositions set out as the primary references would have been an obvious modification to an artisan of ordinary skill. No unexpected or surprising results have been shown on the record as drawn to such.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim recites "molecular weight" without reciting what type of molecular weight, e.g. number average, weight average, "z" average or viscosity average, is

Art Unit: 1711

contemplated. Since these values are variable for any given polymer and composition, recitation of "molecular weight" by bare numbers is not clear and concise.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nathan M. Nutter
Primary Examiner
Art Unit 1711

nmn

11 July 2005